

FIG. 1

<u>INST</u>	<u>HIT / MISS</u>	<u>DATA</u>	
18 ~ LDR[Rm]	HIT	DATA[Rm]	
MOV	N / A	—	
CMP	N / A	—	
:	:	:	
20 ~ LDR[Rm]	MISS	—	
MOV	N / A	—	
CMP	N / A	DATA[Rm]	
:	:	:	
22 ~ LDR[R1]	MISS	—	
24 ~ LDR[R2]	MISS	—	
MOV	N / A	—	
CMP	N / A	28 ~ DATA[R2]	} MISSED DATA RETURNED OUT OF ORDER
ADD	N / A	26 ~ DATA[R1]	

↓ VARIABLE  
DELAY

FIG. 2

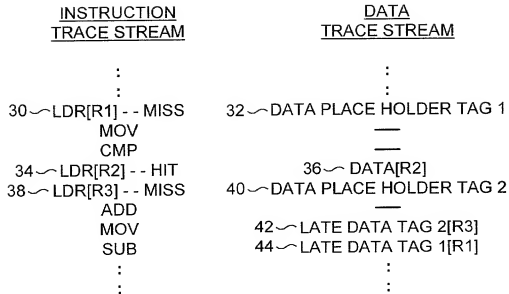


FIG. 3

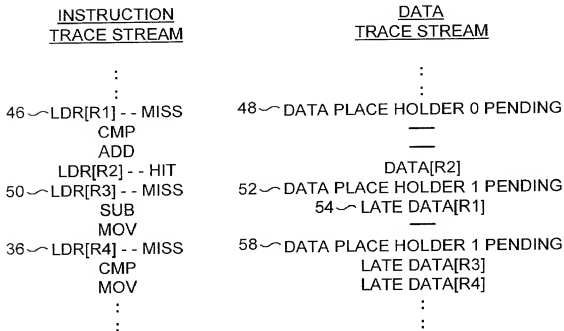


FIG. 4

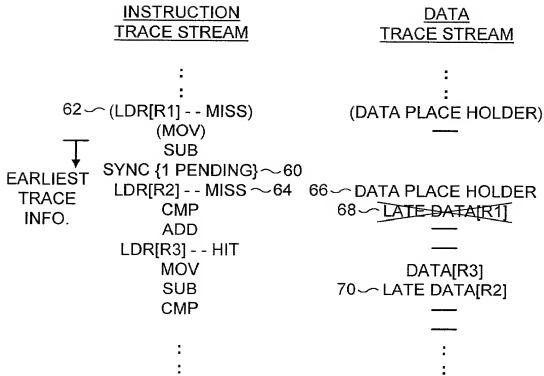


FIG. 5

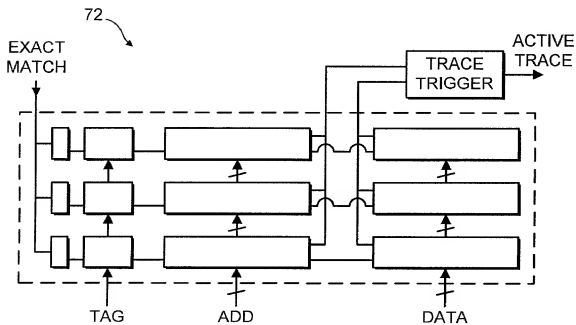


FIG. 6

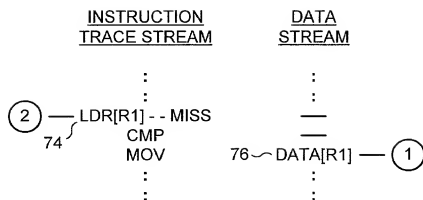
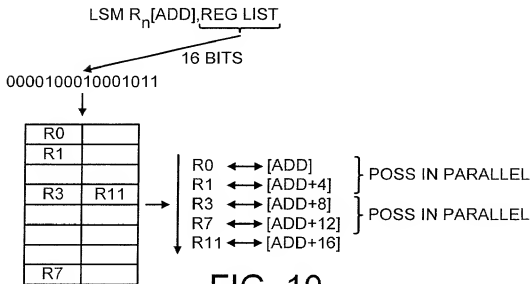
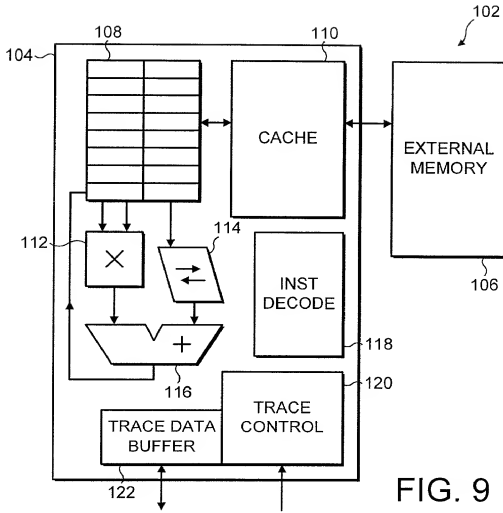


FIG. 7

EXACT MATCH	ADD MATCH	DATA MATCH	TRACE ACTIVATION POINT
✓	✓	✓	①
✓	✓	✗	NONE
✗	✓	✓	②
✗	✓	✗	②

FIG. 8



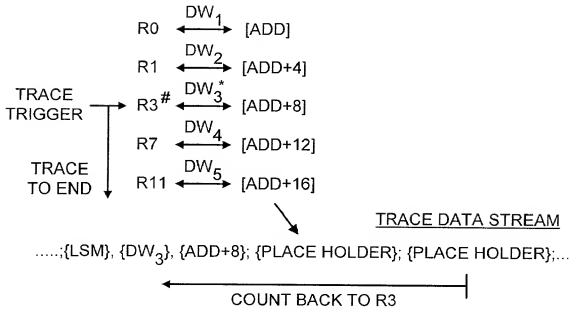


FIG. 11

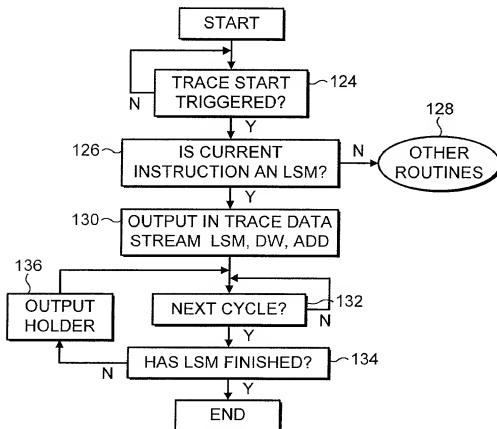


FIG. 12

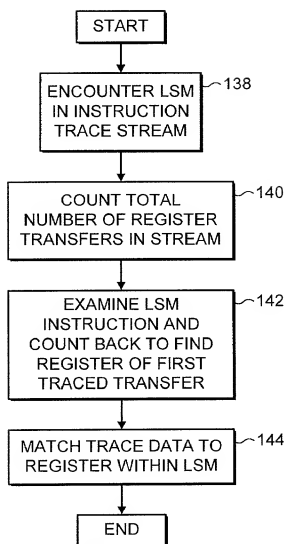


FIG. 13